

CLAIMS

1. Ink jet printhead comprising:

a driving and encoding circuit (20) having a grid-like structure including a plurality of inputs (23) and a plurality of selecting elements (12),

5 a plurality of actuating elements (11) associated with said driving and encoding circuit (20) and suitable for being selectively addressed and commanded by said selecting elements (12) in response to given command signals received through said plurality of inputs (23), so as to cause the ejection of ink droplets from said printhead, and

10 at least one identifying element (21) of said printhead,

characterized in that each of said identifying elements (21) of said printhead is associated with a corresponding selecting element (12) of said driving and encoding circuit (20), to be selectively addressed and identified in response to corresponding identifying signals received through said plurality of inputs (23).

2. Ink jet printhead according to claim 1, **characterized in that** said plurality of actuating elements (11) and each of said identifying elements (21) are suitable for being sounded through corresponding control signals received through said plurality of inputs (23), during a preliminary checking step, the purpose of which is to identify said printhead and to confirm the correct operation of said actuating elements (11).

3. Printhead according to claim 1, **characterized in that** said actuating elements (11) are resistors and said printhead is of the thermal, bubble type for activating the ejection of said ink droplets.

25 4. Head according to claim 1, **characterized in that** said identifying elements (21) are made of a plurality of resistors each one having a resistivity that has been selectively set during the manufacturing process of said printhead, depending on its characteristics.

5. Head according to claim 1, **characterized in that** said identifying elements 30 (21) occupy positions of the grid that are located in correspondence with nozzles (31) not used for printing.

6. Ink jet printhead comprising:

a driving and encoding circuit (20) having a grid-like structure, and

including a plurality of inputs (23), a plurality of selecting elements (12), and a plurality of actuating elements (11) suitable for being selectively addressed and commanded by said selecting elements (12) in response to given command signals received through said plurality of inputs (23), so as to cause the ejection of ink droplets from said printhead, and

at least one identifying element (21) of said printhead,

characterized in that each of said identifying elements (21) of said printhead is associated with a corresponding selecting element (12) of said driving and encoding circuit (20), for being selectively addressed and identified in response to corresponding identifying signals received through said plurality of inputs (23).

7. Integrated ink jet printhead comprising:

a plurality of actuating elements (11) for causing the ejection of ink droplets from said printhead,

a driving and encoding circuit (20), having a grid-like structure, for selectively addressing and commanding each of said actuating elements (11), said grid-like structure being organized into rows and columns that define a plurality of nodes corresponding to said actuating means, and

one or more identifying elements (21) of said head,

characterized in that said one or more identifying elements (21) of said head correspond to nodes arranged, one behind the other, along a given row or column of said grid-like structure, and in that said one or more identifying elements (21) are also provided for being scanned, together with said actuating elements (11), during a preliminary checking step, the purposes of which are both to identify said printhead and to confirm correct operation of said actuating elements (11).